

STATISTICALLY BASED CASCADED ANALOG-TO-DIGITAL  
CONVERTER CALIBRATION TECHNIQUE

ABSTRACT OF THE DISCLOSURE

5 An auto-calibration technique for optimizing the  
transfer function of analog-to-digital converters. The  
technique can be applied to analog-to-digital converter  
(ADC) architectures employing a cascade of n-stages to form  
a composite n-bit ADC transfer function. The technique  
utilizes evaluation of the probability density function of  
individual bits to determine error sign, minimize error  
10 magnitude and assure calibration convergence.